

**METHOD FOR PREPARING INTEGRATED CIRCUIT  
MODULES FOR ATTACHMENT TO PRINTED CIRCUIT SUBSTRATES**

**Abstract of the Disclosure**

A method of preparing an integrated circuit module for attachment to a printed circuit substrate wherein at least one uncased semiconductor die is affixed too a TAB tape frame that has a conductive test pad footprint formed about the perimeter thereof and a bond pad footprint generally centrally disposed within the test pad footprint and where conductive traces connect the bond pads individually to the test pads as well as to ball grid array pads that are generally centrally disposed on the TAB tape within the confines of the bond pad footprint. Wire bonds are then used to connect input/output points of the semiconductor die to selected ones of the bond pads in the bond pad footprint. The semiconductor die and the wire bonding are next overmolded with a plastic encapsulant to form an integrated circuit module. Testing and burn-in of the integrated circuit module is then achieved by connecting test probes to the conductive test pads in the test pad footprint. Only after the test and burn-in is completed is the integrated circuit module cut free from the TAB tape frame and mounted on a printed circuit board using reflow soldering of solder balls on the ball grid array to mating contact areas on the printed circuit board.